Bayside Fuel Oil Depot Draft Upland Site Summary

BAYSIDE FUEL OIL DEPOT (DAR SITE ID #51)

Address: 1100 Grand Street, Brooklyn, New York 10002

Tax Lot Parcel(s): Brooklyn Block 2942, Lot 49

Latitude: 40.713707 Longitude: -73.932007

Regulatory Programs/

Numbers/Codes: SPDES No. NY0007641, USEPA FRS No. 110004386860,

NYSDEC Spill No. 9007551, 9104487, and 9505983,

MOSF No. 2-1280, USEPA ID No. NYD980526420

🔀 No Data Available

1 SUMMARY OF CONSTITUENTS OF POTENTIAL CONCERN (COPCs) TRANSPORT PATHWAYS TO THE CREEK

The current understanding of the transport mechanisms of contaminants from the upland portions of the Bayside Fuel Oil Depot site (site) to Newtown Creek is summarized in this section and Table 1 and supported in the following sections.

Overland Transport

No specific evidence of overland transport was found in available site records. In 1995, 10 gallons of No. 4 fuel oil was spilled at the site to the soil (NYSDEC 2012). The spill was closed in 2009 (NYSDEC 2012). On-site stormwater infrastructure was not described in files available for review. Based on the site topography, runoff could flow overland towards English Kills (see Figure 1). This pathway is a potentially complete historical pathway. There is insufficient evidence to make a current pathway determination.

Bank Erosion

No specific evidence of bank erosion was identified in available site records. In 1965, the site had a 124-foot timber bulkhead along its shoreline (USACE 1965). The New York State Department of Environmental Conservation (NYSDEC) permit database contains water quality permits for the installation of a section of concrete bulkhead at the site in 1991;

however, no additional details regarding overwater activities were provided (NYSDEC 2011). There is insufficient evidence to make a historical or current pathway determination.

Groundwater

The site is located adjacent to English Kills, a tributary of Newtown Creek. In 1991 nonaqueous phase liquid (NAPL) was observed in a monitoring well at the site following a spill of No. 2 fuel oil (EDR 2010). No further information on groundwater investigations was located in files available for review. This is a complete historical pathway. There is insufficient evidence to make a current pathway determination.

Overwater Activities

The site is located adjacent to English Kills, a tributary of Newtown Creek. Petroleum products have been historically and are currently transferred from barges to upland storage tanks via pipeline (EDR 2010). In 1990, 5,000 gallons of No.2 fuel oil were released to English Kills during barge offloading (NYSDEC Spill No. 9007551; NYSDEC2012b; EDR 2010). This is a complete historical pathway and a potentially complete current pathway.

Stormwater/Wastewater Systems

By 1959, the site was discharging sanitary and process wastewater to English Kills (Hazen and Sawyer 1959). In 1965, stormwater at the site flowed over the bulkhead or was collected in on-site stormwater infrastructure and discharged to English Kills (NYSDOH 1965). Since 1993, the site has been discharging treated stormwater and hydrostatic test water to English Kills under a State Pollution Elimination Discharge System (SPDES) permit (NYSDEC 2011). Permits and discharge monitoring reports (DMRs) were not included in files available for review. Direct discharge of stormwater and wastewater is a complete historical pathway and a potentially complete current pathway.

This site is within the Bowery Bay Water Pollution Control Plant (WPCP) sewershed (NYCDEP 2007). Material reviewed while preparing this summary did not include information on wastewater treatment or handling. There is insufficient evidence to make a current or historical pathway determination for discharges to the sewer or combined sewer overflows (CSOs).

Air Releases

Information related to air discharges was not located for this site. There is insufficient evidence to make a historical or current pathway determination.

2 PROJECT STATUS

Records indicate the site is an inactive Resource Conservation and Recovery Act (RCRA) hazardous waste generator (USEPA 2012). No available files containing environmental investigations were identified for this site.

3 SITE OWNERSHIP HISTORY

Respondent Member:				Yes No
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Owner	Years	Occupant	Types of Operations			
I I a lua a	Early 1900s	American Ice Company	Generation of ice blocks			
Unknown	1910s – 1930s	Unidentified coal yard	Coal storage			
	1948 – 1965	Filtered Petroleum				
		Company	Petroleum storage			
		Circa 1948 – 1972				
		Cirillo Brothers Oil				
		Company, Inc. (later				
		known as Cirillo				
		Brothers Terminal, Inc.)	Coal storage			
		(Circa 1969 – 1996)				
		Gates Coal Corporation				
		(Circa 1960 – 1972)				
Cirillo Brothers Land	1965 – 1996	Nightingale Fuel Oil	Petroleum storage			
Corporation	1905 – 1990	(Circa 1969 – 1972)	r ctroicum storage			
		Vijax Coal and Oil				
		Company	Coal and petroleum storage			
		(Circa 1969 – 1978)				
		MacDave Oil Burner				
		Company	Unknown			
		(Circa 1975 – 1978)				
		Strand Coal and Oil				
		Company	Coal and petroleum storage			
		(Circa 1978)				

Owner	Owner Years		Types of Operations				
		Cibro Petroleum Brooklyn, Inc. (Circa 1978 – 1986)					
	1986 – 1996		Unknown				
Bayside Fuel Oil Depot Corporation	1996 – 2001	Bayside Fuel Oil Depot	Petroleum storage				
Grand Street Properties, LLC	2001 – present	Corporation	retroieum storage				

Note:

Additional discussion and sources provided in Section 6.

4 PROPERTY DESCRIPTION

The site occupies approximately 1.5 acres adjacent to English Kills. Site topography indicates that a high point approximately 20 feet above mean sea level exists on the eastern portion of the site. From that high point, the site slopes down gradually to an elevation of approximately 5 feet above mean sea level near English Kills. The site is entirely covered with concrete or other impervious surfaces except for small portions of the site along English Kills. A 2010 aerial photograph of the site is presented as Figure 1.

The site is adjoined by English Kills to the south and east and Grand Avenue to the north and to the west. The area is zoned for manufacturing (NYCDCP 2009).

5 CURRENT SITE USE

The site is used for wholesale and retail distribution of petroleum products, including No. 1, 2, 4, and 6 fuel oils, as well as diesel and kerosene (Bayside Fuel Oil Depot 2011). Petroleum products are transferred to and from on-site bulk petroleum storage tanks to petroleum barges (EDR 2010).

6 SITE USE HISTORY

The first identified occupant of 1100 Grand Street is the American Ice Company, which used the space in the first decade of the 20th century (Sanborn 1907). By 1933, the site was a coal yard (Sanborn 1933). From at least 1948 to at least 1972, Filtered Petroleum Company

occupied the site. In 1972, it was sharing the site with a number of other businesses including Cirillo Brothers Oil Company, Inc., who began operating at the site in 1969 and owned the property through 1996 (NY Telephone Company 1948, 1969, 1972). Other businesses operating at the site included the Gates Coal Corporation, from 1969 to 1972; Nightingale Fuel Oil, from 1969 to 1972; Vijax Coal and Oil Company, from 1969 to 1978; MacDave Oil Burner Company, from 1975 to 1978; and Strand Coal and Oil Company in 1978 (NY Telephone Company 1969, 1972, 1975, 1978). Cirillo Brothers Oil Company, Inc., changed its name to Cirillo Brothers Terminal, Inc., around 1975.

Cibro Petroleum Brooklyn, Inc. (Cibro) occupied the property from at least 1978 to at least 1986 (NY Telephone Company 1978, 1986). Cibro may have been a subsidiary company of Cirillo Brothers Terminal, Inc., which itself changed its name to Cibro Petroleum Brooklyn, Inc., in 1976; however, subsequent records appear to treat Cibro and Cirillo Brothers Terminal, Inc., as different corporate entities (NYSDOS 2011).

Bayside Fuel Oil Depot Corporation (Bayside Fuel Oil Depot) bought the property from Cirillo Brothers Land Corporation in 1996 (Bayside Fuel Oil Depot 1996). Bayside Fuel Oil Depot subsequently sold the property to Grand Street Properties, LLC, in 2001 (Bayside Fuel Oil Depot 2002).

7 CURRENT AND HISTORICAL AREAS OF CONCERN AND COPCS

The current understanding of the historical and current potential upland and overwater areas of concern at the site is summarized in Table 1. The following sections provide a brief discussion of the potential sources and COPCs at the site requiring additional discussion.

Potential areas of concern at the site include areas used for coal/petroleum storage and distribution practices and operations (including aboveground storage tanks [ASTs] and underground storage tanks [USTs] and associated conveyance piping and ancillary equipment). COPCs for historical and current sources include petroleum hydrocarbons (including diesel, kerosene, and various fuel oils), polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals.

7.1 Uplands

The site was a RCRA non-generator in 1999, 2006, and 2007. In 1998, the site was classified a small quantity generator (SQG; EDR 2010). No further information regarding hazardous waste generation at the site was identified in records available for review.

The site is a registered major oil storage facility (MOSF; MOSF No. 2-1280; EDR 2010). In 1986, a circular oil tank and five rectangular fuel oil tanks (three 250,000-gallon tanks, one 150,000-gallon tank, and one 100,000-gallon tank) were present at the site (Sanborn 1986). The NYSDEC database lists 11 USTs and four ASTs at the site (NYSDEC 2012). The capacity, contents, and installation date of the storage tanks are summarized as follows:

	12/1972 In se 12/1988 In se 08/1992 In se 2 11/1999 In se 12/1937 In se			
Tank ID	Install Date	Tank Status	Capacity (gallons)	Contents
Aboveground S	torage Tank			
006	12/1972	In service	649,992	No. 1, 2, or 4 fuel oil
000	12/1988	In service	5,000	Empty
OBF	08/1992	In service	1,080	No. 1, 2, or 4 fuel oil
OBF-2	11/1999	In service	275	No. 1, 2, or 4 fuel oil
Underground S	torage Tank			
001	12/1937	In service	99,960	No. 1, 2, or 4 fuel oil
002	12/1937	In service	249,984	No. 1, 2, or 4 fuel oil
003	12/1937	In service	149,982	No. 1, 2, or 4 fuel oil
004	12/1937	In service	249,984	Diesel
005	12/1937	In service	249,984	Diesel
00A	12/1965	In service	550	Empty
00B	12/1965	In service	550	Empty
00C	12/1965	In service	550	Empty
00D	12/1965	In service	550	Empty
OBF1	Not Reported	In service	2,000	Empty
OPS	Not Reported	In service	7,200	Empty

7.2 Overwater Activities

Current and historical uses of the site include offloading of petroleum barges in English Kills. In 1965, the site had a 124-foot timber bulkhead along its shoreline with one 8-inch and four 6-inch pipelines extending from the bulkhead to five USTs and one AST (total capacity of

39,300 barrels; USACE 1965). In 1998, the site had a timber pile, a timber-decked wharf extending from remains of a timber pile, a concrete-decked wharf with 140-by-14-foot walkway, a pipeline trestle approach to the inner side fronting timber bulkhead with solid fill, and three timber breasting dolphins in line with the face. The site was being maintained for emergency receipt of petroleum products by barge. Six 6-inch pipelines, not in use and sealed, extended from the wharf to ten steel storage tanks (total capacity of 137,000 barrels). The tanks were also connected to an interstate pipeline (USACE 1999).

In 1990, site records indicate 5,000 gallons of No. 2 fuel oil was spilled to English Kills during overwater activities at the site (NYSDEC Spill No. 9007551). Additional information about this spill is included in Section 7.3.

The NYSDEC permit database contains water quality permits for the installation of a section of concrete bulkhead at the site in 1991; however, no additional details regarding overwater activities were provided (NYSDEC 2011).

7.3 SpillsDocumented spills at the site are summarized as follows (NYSDEC 2012):

NYSDEC Spill No.	Spill Date	Close Date	Material Spilled	Remarks
9007551	10/10/90	03/25/09	5,000 gallons of No. 2 fuel oil	Overfill of 200,000-gallon upland tank from barge; English Kills affected
9104487	07/26/91	03/25/09	Unknown quantity of No. 2 fuel oil	Equipment failure; spill class: known release that creates potential for fire or hazard; groundwater affected
9505983	08/15/95	03/25/09	10 gallons of No. 4 fuel oil	Soil affected

Note:

NYSDEC - New York State Department of Environmental Conservation

8 PHYSICAL SITE SETTING

Site-specific hydrogeologic information was not identified in documents available for review. The geologic setting for Newtown Creek consists of impermeable Precambrian and Paleozoic crystalline bedrock, overlain by the Upper Cretaceous Raritan formation, Magothy formation and Matawan Group (undifferentiated), unconsolidated Pleistocene deposits and upper Pleistocene glacial deposits and Holocene shore, beach salt-marsh deposits, and alluvium, along with local occurrences of artificial fill (Buxton et al. 1981; Soren and Simmons 1987). The primary areas of groundwater discharge are Newtown Creek and its tributaries and the East River (Misut and Monti 1999). In the vicinity of Newtown Creek, groundwater flow in the Upper Glacial aquifer is generally north and south towards the creek. With increased distance from the creek, groundwater will flow towards the nearest surface water body to discharge (Misut and Monti 1999). Incidences of perched groundwater may occur above the Upper Glacial Aquifer in some areas, particularly in formerly low-lying areas that have been filled. Groundwater flow at a specific property may differ from the regional pattern due to pumping for groundwater treatment or dewatering activities (Misut and Monti 1999), the presence of buried utilities, or other preferential pathways.

9 NATURE AND EXTENT (CURRENT UNDERSTAND	ING OF ENVIRONMENTAL
CONDITIONS)	
9.1 Soil	
Soil Investigations	Yes No
Bank Samples	Yes No Not Applicable
Soil-Vapor Investigations	Yes No
Information related to soil investigations was not found in	n reviewed documents.
9.2 Groundwater	
Groundwater Investigations	Yes No
NAPL Presence (Historical & Current)	Yes No
Dissolved COPC Plumes	Yes No
Visual Seep Sample Data	Yes No Not Applicable

9.2.1 Groundwater Investigations

Following a 1991 spill at the site (NYSDEC Spill No. 9104487; see Section 7.3), the site conducted weekly and monthly reports on gauging of monitoring wells (EDR 2010). No further information related to these reports or other groundwater investigations at the site were identified in documents available for review.

9.2.2 NAPL (Historical and Current) Presence

An unreported quantity of NAPL was extracted from an on-site monitoring well following a 1991 spill at the site (NYSDEC Spill No. 9104487; see Section 7.3; EDR 2010). No further information related to NAPL at the site was identified in documents available for review.

9.3 Surface Water

Surface Water Investigation	Yes No
SPDES Permit (Current or Past)	🔀 Yes 🗌 No
Industrial Wastewater Discharge (IWD) Permit (Current or Past)	☐ Yes ⊠ No
Stormwater Data	☐ Yes ⊠ No
Catch Basin Solids Data	☐ Yes ⊠ No
Wastewater Data	☐ Yes ∑ No

9.3.1 Stormwater and Wastewater Systems

A 1959 Water Usage Survey indicated the site discharged sanitary and process wastewater to a municipal system. Process wastewater was routed through an oil water separator (OWS) prior to discharge (Hazen and Sawyer 1959). In 1965, Filtered Petroleum Products (a historical site occupant) discharged "oil wastes" from an on-site outfall. The discharge was effluent from "ineffective" on-site OWSs. The receiving water was reported as Whale Creek, which is located more than two creek miles from the site (NYSDOH 1965).

This site is within the Bowery Bay Water Pollution Control Plant (WPCP) sewershed (NYCDEP 2007). No outfall or connection to the municipal sewer system was noted for the site in material reviewed.

9.3.2 SPDES Permit

According to the NYSDEC permit database, since 1993, the site has had a SPDES permit for the surface discharge of treated stormwater and hydrostatic test water in a maximum amount of 100,000 gallons per day to the English Kills (NYSDEC 2011). Effluent parameters include flow rate, total suspended solids (TSS), ethylbenzene, total residual chlorine, toluene, pH, oil and grease, settleable solids, benzene, xylene, and naphthalene from two discharge points (USEPA 2012). No discharge data was found in available site records. The most recent permit renewal was on March 2, 2010, and will expire on December 31, 2015. Effluent limitations and reporting requirements were unchanged from the original permit; however, the original permit was not found in available site records.

9.4	Sediment	
Creek	Sediment Data	Yes No Not Applicable
No sed	liment investigations have been condu	acted at the site.
9.5	Air	
Air Pe	rmit	☐ Yes ☑ No ☐ Yes ☑ No
Air Da	ta	☐ Yes ☑ No

10 REMEDIATION HISTORY (INTERIM REMEDIAL MEASURES AND OTHER CLEANUPS)

No information was found related to remedial activities at the site.

No air investigations have been conducted at the site.

11 BIBLIOGRAPHY/INFORMATION SOURCES

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12 ATTACHMENTS

Figures

Figure 1 Site Vicinity Map: Bayside Fuel Oil Depot

Tables

Table 1 Potential Areas of Concern and Transport Pathways Assessment

Table 1

Potential Areas of Concern and Transport Pathways Assessment – Bayside Fuel Oil Depot

Potential Areas of Concern	ı	Vledia	a Imp	acte	d	COPCs								Potential Complete Pathway												
							TPH		٧	OCs																
Description of Areas of Concern	Surface Soil	Subsurface Soil	Groundwater	Catch Basin Solids	Creek Sediment	Gasoline-Range	Diesel – Range	Heavier – Range	Petroleum Related (e.g., BTEX)	SOOA	Chlorinated VOCs	SOOAS	РАНѕ	Phthalates	Phenolics	Metals	PCBs	Herbicides and Pesticides	Dioxins/Furans	Overland Transport	Groundwater	Direct Discharge – Overwater	Direct Discharge – Storm/Wastewater	Discharge to Sewer/CSO	Bank Erosion	Air Releases
Spills	٧	?	٧	?	?	?	٧	٧	?	?	?	3	?	?	?	?	?	,	?	?	٧	٧	?	?	?	?
Equipment and products used and activities performed during former ice block generation, and coal and petroleum storage and distribution practices and operations	?	?	?	?	?	?	٧	?	?	Ş	?	è	ŗ	?	?	?	?	ŗ	?	?	?	٧	?	?	?	?
Petroleum USTs/ASTs and associated conveyance piping	?	?	?	?	?	?	~	?	?	?	?	?		?	?	?	?	?	?	?	?	?	?	?	?	?
Equipment and products used and activities performed during current petroleum storage and distribution practices and operations	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?

Notes:

√ – COPCs are/were present in areas of concern having a current or historical pathway that is determined to be complete or potentially complete.

? – There is not enough information to determine if COPC is/was present in area of concern or if pathway is complete.

-- - Current or historical pathway has been investigated and shown to be not present or incomplete.

AST – aboveground storage tank

BTEX – benzene, toluene, ethyl benzene, and xylenes

COPC – constituent of potential concern

CSO – combined sewer overflow

PAH – polycyclic aromatic hydrocarbon

PCB - polychlorinated biphenyl

SPDES – State Pollution Elimination Discharge System

SVOC – semi-volatile organic compound

TPH – total petroleum hydrocarbon

UST – underground storage tank

VOC – volatile organic compound



